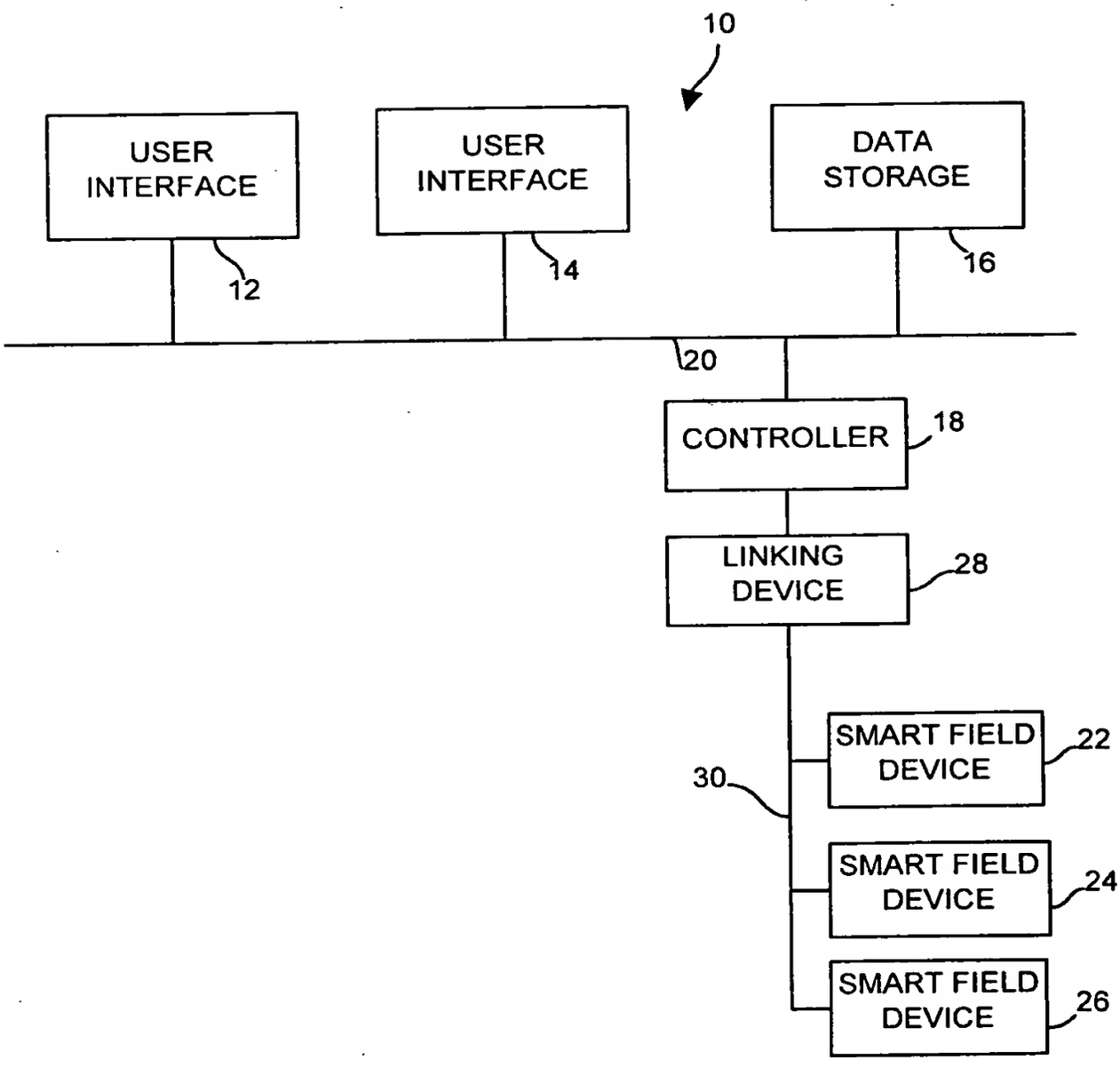
10
USER INTERFACE
USER INTERFACE
DATA STORAGE
12
14
16
20
CONTROLLER
18
LINKING DEVICE
28
SMART FIELD DEVICE
22
30
SMART FIELD DEVICE
24
SMART FIELD DEVICE
26

FIG. 1

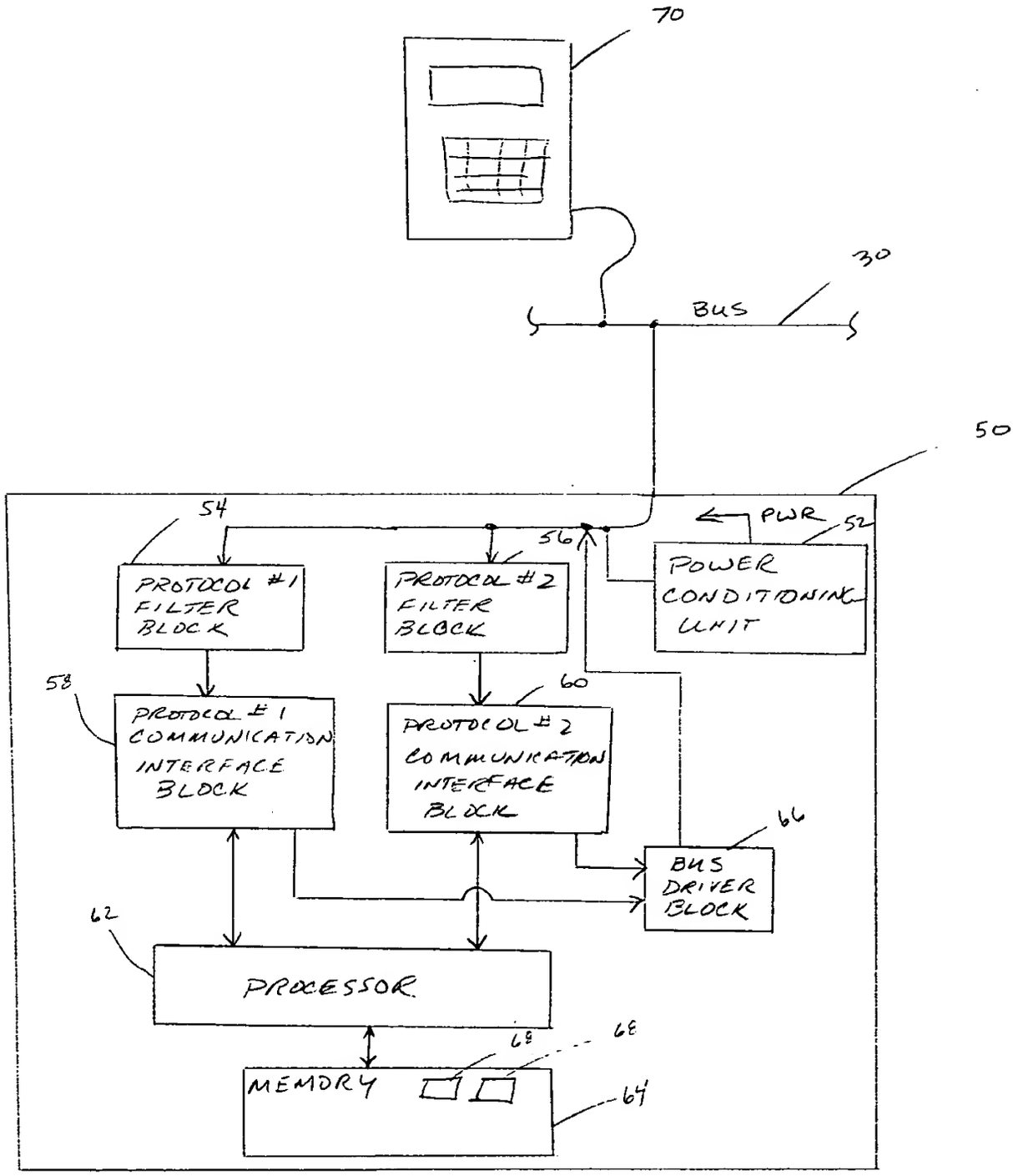
70
30
BUS
50
54
PWR
52
56
PROTOCOL #1 FILTER BLOCK
PROTOCOL #2 FILTER BLOCK
POWER CONDITIONING UNIT
58
60
PROTOCOL #1 COMMUNICATION INTERFACE BLOCK
PROTOCOL #2 COMMUNICATION INTERFACE BLOCK
66
BUS DRIVER BLOCK
62
PROCESSOR
68
69
MEMORY
64

FIG. 2

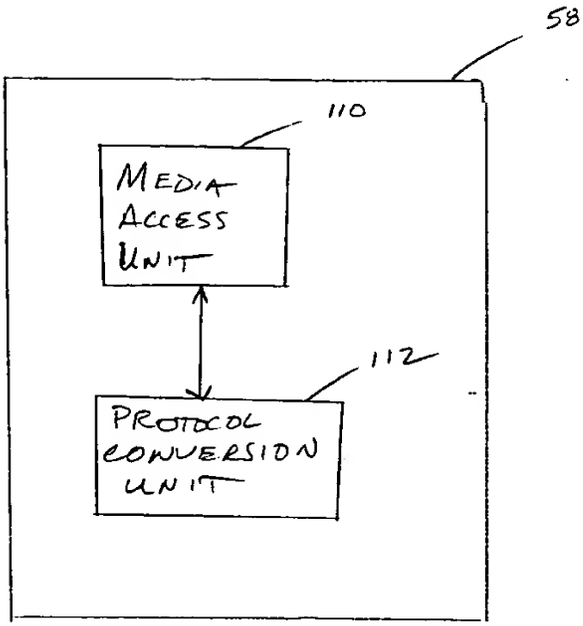

FIG. 4

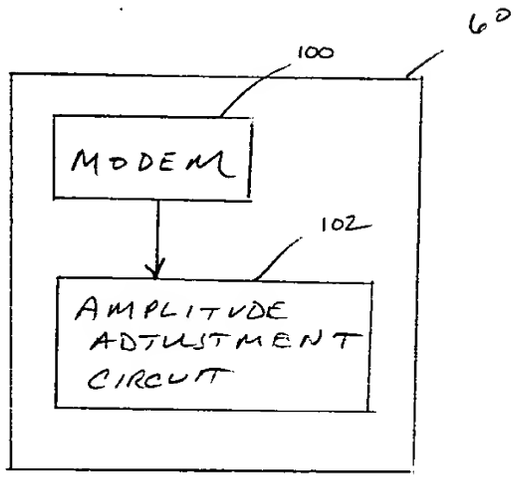

FIG. 3

FILE = 06005/36578

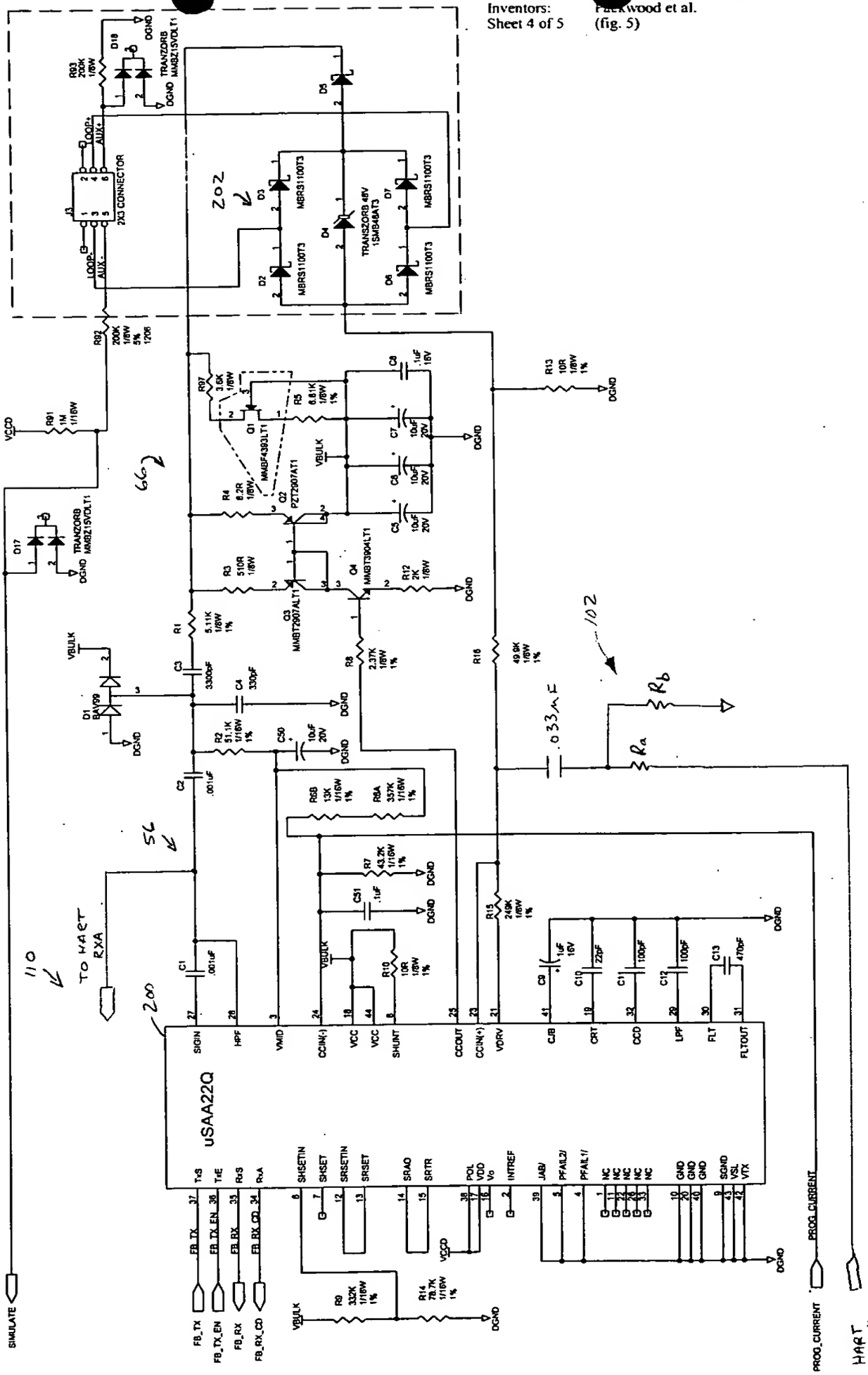
uSAA22Q
2X3 CONNECTOR
TRANZORB MMBZ15VDLT1
MBR5110OT3
TRANSZORB 48V 1SMB48AT3
MMBF4393LT1
PZT2907AT1
MMBT3904LT1
MMBT2907ALT1
BAV99
.033uF
Ra
Rb
TO HART RXA
SIMULATE
FB_TX
FB_TX_EN
FB_RX
FB_RX_CD
PROG_CURRENT
HART DTAX
VCOD
VBULK
DGND
VCCD
SIGIN
HPF
VMID
CCIN(-)
VCC
SHUNT
CCOUT
CCIN(+)
VDRV
CJB
CRT
OCD
LPF
FLT
FLTOUT
TxS
TxE
RxS
RxA
SHSETIN
SHSET
SRSETIN
SRSET
SRAO
SRTR
POL
VDD
Vo
INTREF
JAB/
PFAIL2/
PFAIL1/
NC
GND
SGND
VSL
VTX

FIG. 5

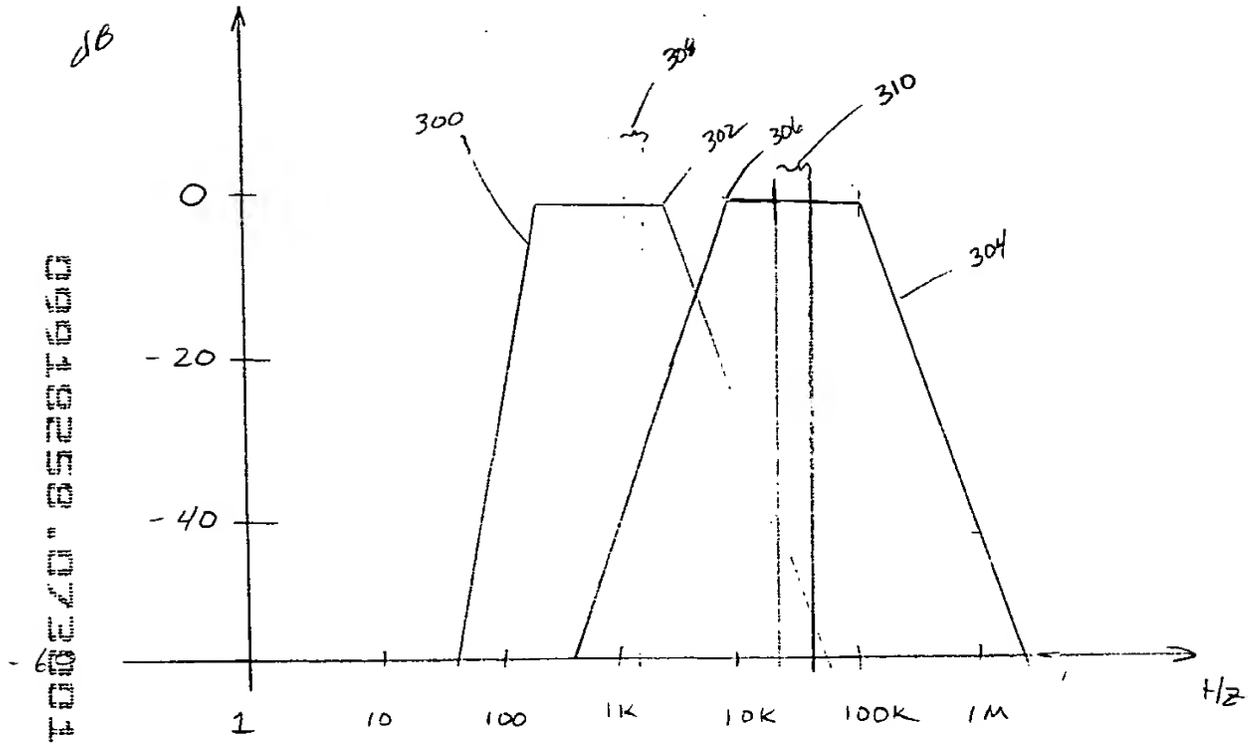

FIG. 6